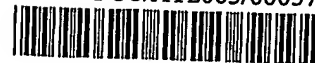


Translation

PATENT COOPERATION TREATY

PCT/AT2003/000377



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference R 42837	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/AT2003/000377	International filing date (day/month/year) 19 December 2003 (19.12.2003)	Priority date (day/month/year) 19 December 2002 (19.12.2002)
International Patent Classification (IPC) or national classification and IPC G07B 15/00, G08C 23/04, H04B 10/22		
Applicant EFKON AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 05 July 2004 (05.07.2004)	Date of completion of this report 28 October 2004 (28.10.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AT2003/000377

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AT 03/00377

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-11	YES
	Claims		NO
Inventive step (IS)	Claims	1-11	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

### 2. Citations and explanations

This report makes reference to the following documents:

- D1: DE 32 48 544 A (SIEMENS AG) 12 July 1984  
(1984-07-12)
- D2: DE 42 39 863 A (SAUER GERD) 29 April 1993  
(1993-04-29)
- D3: EP-A-0 413 948 (SIEMENS AG) 27 February 1991  
(1991-02-27)
- D4: US-A-5 825 007 (JESADANONT MONGKOL) 20 October  
1998 (1998-10-20)
- D5: DE 43 27 263 A (DAIMLER BENZ AG) 8 September  
1994 (1994-09-08).

#### 1. Independent claim 1:

D1 is regarded as the prior art closest to the subject matter of independent claim 1.

D1 discloses (see figures 5 to 8 and page 10, line 25 to page 13, line 24) a system for transmitting information by means of infrared radiation, using information data that has been modulated up, between stationary beacons and vehicles, each of which is equipped with a transmitter/receiver combination. The transmitters are connected in parallel and transmit the same data simultaneously, and the

receivers are connected in parallel on their output sides.

Therefore, the subject matter of independent claim 1 differs from the known document D1 in that in the second direction, the lateral direction, only IR transmission elements are provided, and in that for the IR receiving elements directed in the first direction, a directional characteristic is provided that is sufficiently broad for receiving also in the lateral direction.

The objective problem solved by these features is that of providing a simple and cost-effective design of the communication device, because the IR receiving elements point only in the direction of travel of the vehicle.

The available prior art does not disclose a vehicle infrared communication device with IR transmission elements in two directions (direction of travel and lateral) and IR receiving elements that point only in the direction of travel and receive information transmissions from both directions.

Therefore, the subject matter of claim 1 is novel (PCT Article 33(2)) and inventive (PCT Article 33(3)).

2. Dependent claims 2 to 11:

Claims 2 to 11 are dependent on claim 1 and therefore the subject matter of claims 2 to 11 is novel (PCT Article 33(2)) and inventive (PCT Article 33(3)).